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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/404,313	09/24/1999	TATSUHIKO AMAGAI	Q055935	8283

7590

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SUGHRUE MION ZINN MACPEAK & SEAS  
2100 PENNSYLVANIA AVE NW  
WASHINGTON, DC 20037

EXAMINER
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HARPER, KEVIN C

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 02/23/2004

11

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/404,313

Applicant(s)

AMAGAI ET AL.

Examiner

Kevin C. Harper

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6 and 8-11 is/are rejected.
- 7) ☒ Claim(s) 3,4,7,12 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/24/99 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

***Response to Arguments***

Applicant's arguments filed December 10, 2003, have been fully considered but they are not persuasive. In response to applicant's argument that Yokoyama in view of Albal and Stoner does not provide proper motivation to meet the claim limitations, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Yokoyama does not disclose a packet memory similar to Figure 1, item 2 of the present invention located between a transmission path (or network) and a node (Figures 1-2). However, Albal teaches a packet memory (Figure 1, item 19) between a transmission path and a node (Figure 1) for storing an entire packet (col. 7, lines 61-64) waiting for operation by the node. The motivation is similar to motivation of the present invention for having a packet memory (page 11, line 27 through page 12, line 4). Yokoyama in view of Albal does not disclose separate component buses between components. However, Stoner teaches separate buses providing beneficial access means to a device (col. 4, lines 11-14). The motivation is similar to motivation of the present invention for the benefits of a dual-port memory (page 16, lines 12-21).

***Drawings***

1. The proposed drawing amendment filed December 10, 2003, has been approved. However, the drawing objection is maintained until a corrected drawing is submitted to overcome the objection. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include reference sign "14" as mentioned in the description on page 25, line 26. Corrected

drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2, 5-6 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama et al. (US 5,303,344) in view of Albal et al. (US 4,821,265) and Stoner et al. (US 6,052,383).

2. Regarding claims 1-2, 5-6, 8-9 and 11, Yokoyama discloses a packet processing apparatus (Figure 8) for converting packet data through several layers (abstract, lines 10-21). The apparatus comprises a shared memory (item 30) for storing in a same memory space part of each of the packet data accessed by the layer 2 and layer 3 processing (Figure 10; col. 6, line 61 through col. 7, line 2).

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However, the apparatus does not disclose a packet memory for storing the entire packet. Albal discloses a packet memory (Figures 1 and 2, item 19) for storing an entire packet at a communication interface in order to hold packets not ready for transmission from the interface (items 60, 62, 84 and 86; col. 7, lines 61-64). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a packet memory in the invention of Yokoyama. Further, Yokoyama in view of Albal does not disclose that the layer 2 and layer 3 processing processors access the shared memory through separate buses. Stoner discloses separate component buses (Figure 1, items 9, 11, 13 and 15) in order to give dedicated access between the components (col. 4, lines 11-14 and lines 43-54). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have the processors access the memory through different buses in the invention of Yokoyama in view of Albal. Further regarding claim 2, the shared memory (Figure 8, item 30) has multiple ports and layer 2 and 3 processing is performed according to the OSI model (col. 5, lines 11-18).

3. Regarding claim 10, a processor at a layer higher than 3 is connected to the packet processors (Figure 1, item 70; Figure 3).

***Allowable Subject Matter***

4. Claims 3-4, 7 and 12-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and rewritten to overcome applicable claim objections.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 703-305-0139. The examiner can normally be reached weekdays, except Wednesday, from 9:30 AM to 8:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 703-308-5463. The fax number for Technology Center (TC) 2600 is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office for TC 2600 at 703-306-0377.

Kevin C. Harper



February 12, 2004

Seema S. Rao  
SEEMA S. RAO 2/20/04  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600